

## PAK4/5/6 Polyclonal Antibody

Catalog No: YT3572

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: PAK4/5/6

**Fields:** >>ErbB signaling pathway;>>Ras signaling pathway;>>Axon guidance;>>Focal

adhesion;>>T cell receptor signaling pathway;>>Regulation of actin

cytoskeleton;>>Human immunodeficiency virus 1 infection;>>MicroRNAs in

cancer;>>Renal cell carcinoma

Gene Name: PAK4 PAK5 PAK6

**Protein Name:** Serine/threonine-protein kinase PAK 4

Q8BTW9

Human Gene Id: 10298

**Human Swiss Prot** 

No:

Mouse Gene Id: 70584

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

PAK4/5/6. AA range:441-490

O96013;Q9P286;Q9NQU5

**Specificity:** PAK4/5/6 Polyclonal Antibody detects endogenous levels of PAK4/5/6 protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 80kD

**Cell Pathway:** ErbB\_HER;Axon guidance;Focal adhesion;T\_Cell\_Receptor;Regulates Actin

and Cytoskeleton; Renal cell carcinoma;

**Background:** PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1,

PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by

RefSeg, Jul 2008],

**Function :** catalytic activity:ATP + a protein = ADP + a phosphoprotein.,function:Activates

the JNK pathway. Plays a role in the reorganization of the actin cytoskeleton and

in the formation of filopodia. Phosphorylates and inactivates the protein

phosphatase SSH1, leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor cofilin. Decreased cofilin activity may lead to

stabilization of actin filaments. Phosphorylates

ARHGEF2.,PTM:Autophosphorylated on serine residues when activated by CDC42/p21.,PTM:Phosphorylated on tyrosine residues upon stimulation of FGFR2.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein

kinase family. STE20 subfamily., similarity: Contains 1 CRIB

domain.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with FGFR2 and GRB2 (By similarity). Interacts tightly with GTP-bound but not GDP-

bound CDC42/p21 and weakl

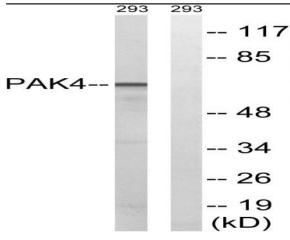
Subcellular Location :

Cytoplasm . Seems to shuttle between cytoplasmic compartments depending on the activating effector. For example, can be found on the cell periphery after

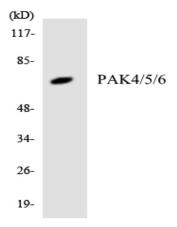
activation of growth-factor or integrin-mediated signaling pathways. .

**Expression :** Highest expression in prostate, testis and colon.

## **Products Images**



Western blot analysis of lysates from K562 cells, treated with PMA 125ng/ml 30', using PAK4/5/6 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from Jurkat cells using PAK4/5/6 antibody.